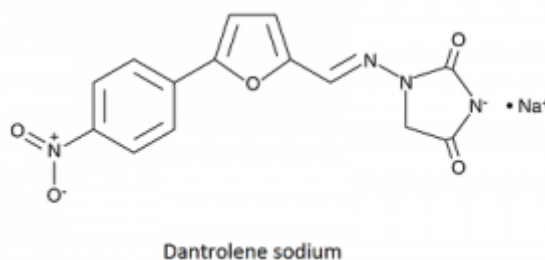
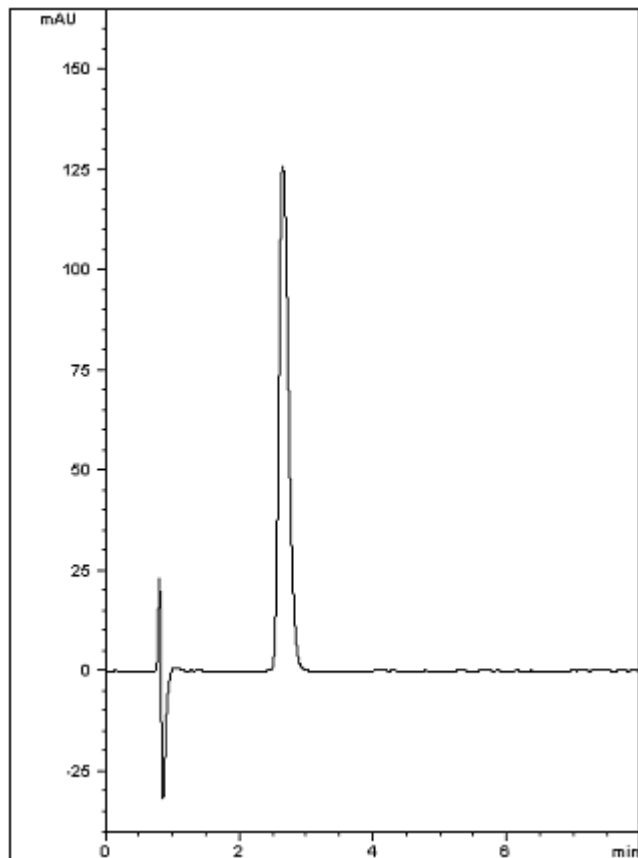


Dantrolene Sodium has several amine groups that can interact with lone-silanols causing problematic peak tailing when analyzed with conventional HPLC columns. By utilizing a Bidentate C18™ Column with its Silica Hydride™ surface, challenging compounds like Dantrolene can be readily retained with symmetrical peak shape.



Peak:

Dantrolene Sodium

### Method Conditions:

**Column:** Cogent Bidentate C18™, 4µm, 100Å

**Catalog No.:** 40018-75P

**Dimensions:** 4.6 x 75 mm

**Mobile Phase:** 60% DI Water / 40% Acetonitrile / 0.1% Formic Acid (v/v)

**Injection Volume:** 2µL

**Flow Rate:** 1.0ml / min

**Detection:** 225 nm

**Samples:** 0.1 mg/mL Dantrolene Sodium in 50:50 Acetonitrile: DI H2O

**Note:** Essential to muscle contraction are Ryanodine Receptors that regulate the release of Calcium from the Sarcoplasmic Reticulum of muscle cells. Dantrolene Sodium is a postsynaptic muscle relaxant that lessens the "excitation-contraction" coupling response in these cells. It achieves this by inhibiting Calcium binding to Ryanodine Receptor 1 and decreasing intracellular Calcium concentrations.

Printed from the Chrom Resource Center  
Copyright 2024, All Rights Apply  
MicroSolv Technology Corporation

9158 Industrial Blvd. NE, Leland, NC 28451

tel. (732) 380-8900, fax (910) 769-9435

Email: customers@mtc-usa.com

Website: www.mtc-usa.com



**Attachment**

**A384 Dantrolene AppNote pdf** 0.1 Mb [Download File](#)

Printed from the Chrom Resource Center

Copyright 2024, All Rights Apply

**MicroSolv Technology Corporation**

9158 Industrial Blvd. NE, Leland, NC 28451

tel. (732) 380-8900, fax (910) 769-9435

Email: [customers@mtc-usa.com](mailto:customers@mtc-usa.com)

Website: [www.mtc-usa.com](http://www.mtc-usa.com)